

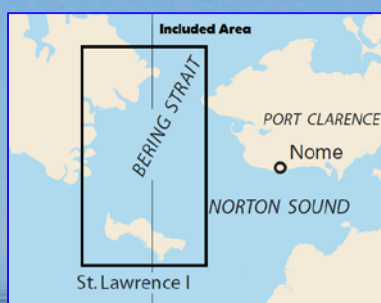
BookletChart™



Bering Sea – St. Lawrence Island to Bering Strait **NOAA Chart 16220**

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker

Approximate Page			
4	5	6	7
8	9	10	11
12	13	14	15
16	17	18	19
20	21	22	23



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=16200>.



(Selected Excerpts from Coast Pilot)

St. Lawrence Island is in the N part of the Bering Sea about 120 miles S of Bering Strait. In clear weather can be seen from a distance of 30 to 35 miles. From Southeast Cape a ridge of mountains extends in a N direction across the island, and another ridge extends in a N direction from Apavawook Cape to Northeast Cape. Between these two ridges a deep bight makes in from S, and at its head very low land extends N across the island. The shore

of the E end of the island is generally a low sand beach with outlying rocks; the mountain ridges begin 0.5 to 2 miles back from the beach. **Northeast Cape** is low tundra land, with numerous freshwater lakes. The

cape is 2 miles wide to the foot of a mountain that rises abruptly and has a peak that can be seen on a clear day for 35 miles or more. Although the bottom is irregular off the point of the cape, no breakers were noticed while passing it in rough weather. At a point on the N shore 6 miles W of Northeast Cape, breakers extend 1 mile offshore. **Apavawook Cape** is so rounding that it has no definite point. This entire stretch of coast is a low, narrow strip behind which is a large lagoon. **Punuk Islands** are a group of three small islands 1.5 miles long. The shores of all the islands are foul. Vessels should approach these islands with caution.

There was, in 1951, a clear approach to good anchorage in N and W weather off **Maknik Lagoon**, NW of Punuk Islands. The anchorage, in 6½ fathoms, is in 63°09'N, 169°15'W, about 1.5 miles off the beach. Maknik Lagoon is behind the low sand barrier beach. Heavy breakers have been observed in the channel between Punuk Islands and Apavawook Cape; vessels should not attempt to pass through.

Southeast Cape has a reef extends about 0.5 mile SE from the point. The W point is lower and a reef makes off from the point in a S direction for 2 to 3 miles. The bight between these points is very foul and should be avoided.

Kialegak Point is a long sandspit strewn with rocks that extends in an E direction from the highland of the coast. A reef extends S from the S side of the sandspit for about 1 mile. The remains of a native village are on the sandspit.

Northwest Cape is a steep, black bluff and flat on top. A wide sand beach is W of the bluff. **Gambell** is a native village with a school and a store. In W winds, breakers have been observed that extend 400 yards NW from the NW tip of land about 1.7 miles W of Northwest Cape. The bay, 6 miles SE of Northwest Cape, affords anchorage with protection from S and W winds, in 3 to 9 fathoms; sand and rocky bottom. Several rock pinnacles, the largest of which is 25 feet high, are off the SW tangent of Southwest Cape on the E side of the entrance to Murphy Bay. A vessel reported striking a submerged rock about 2 miles offshore at a point about 16 miles NE of Southwest Cape.

A reef, bare at low water, makes off 1 mile in a 220° direction from **Siknik Cape**. The submerged part of this reef extends about 4 miles in a general 175° direction from the bare part. This reef is dangerous, as the water shoals abruptly when approaching the cape.

The rest of the island is generally high and rolling. There are some detached rocks showing off the N shore near **Kookoolik Point** and **Savoonga Point**. It is probable that with care an anchorage may be found almost anywhere around the island, but the shores must be approached with caution.

An aerolight is shown at **Savoonga**. Two white windmills that generate electricity for the village are visible 1.0 mile W of the village. Landing small craft at Savoonga is highly dependent on surf conditions. The best landing point in the vicinity of Savoonga can be found on the SE shore of Koomlangeelkuk Bay.

Warning - The soil, surface waters, and vegetation of St. Lawrence Island are potentially contaminated by the microscopic eggs of a parasite that causes a long-term and sometimes fatal infection of the liver known as alveolar hydatid disease. This parasite is unusually common on this island, where it is carried by mice, dogs, cats, and wild foxes. Do not transport these animals under any circumstances from the island to other localities.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Juneau

Commander
17th CG District
Juneau, Alaska

(907) 463-2000

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

These volumes are available online at <http://www.navcen.uscg.gov>

16220



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES

ALASKA - WEST COAST

BERING SEA

ST. LAWRENCE ISLAND TO BERING STRAIT

Mercator Projection
Scale 1:315,350 at Lat 64°30'

North American Datum of 1983
(World Geodetic System 1984)

DEPTHS IN METERS AND DECIMETERS
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo moose code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Hot rotating
B black	Iso isophase	OBSC obscured	a seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VO very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bls boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Gr grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obsn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard, Geological Survey, and National Geospatial-Intelligence Agency.

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No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

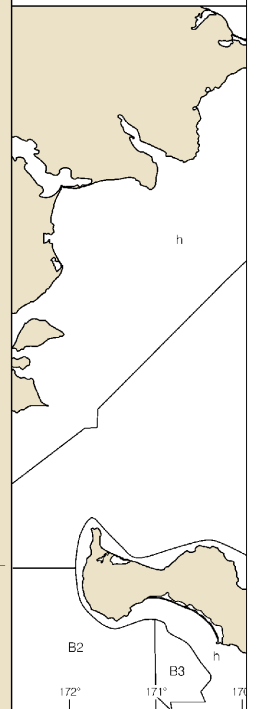
Station positions are shown thus:

○ (Accurate location) o (Approximate location)

RUSSIAN-ENGLISH TRANSLATIONS

Russian	English	Russian	English
Banka.....	bank, shoal	Mys (M).....	point, cape
Bukhta (B).....	small bay, cove	Ostrov (O).....	island
Gavan'.....	harbor	Ozero (Oz).....	lake
Gora.....	mountain, hill	Poluostrov.....	peninsula
Guba.....	bay	Proliv.....	sound, strait
Laguna.....	lagoon	Zaliv.....	gulf, bay, inlet

SOURCE		
A	1990-2010	NOS Surveys
B2	1970-1989	NOS Surveys
B3	1940-1969	NOS Surveys
B4	1900-1939	NOS Surveys
h		Miscellaneous



SOURCE D

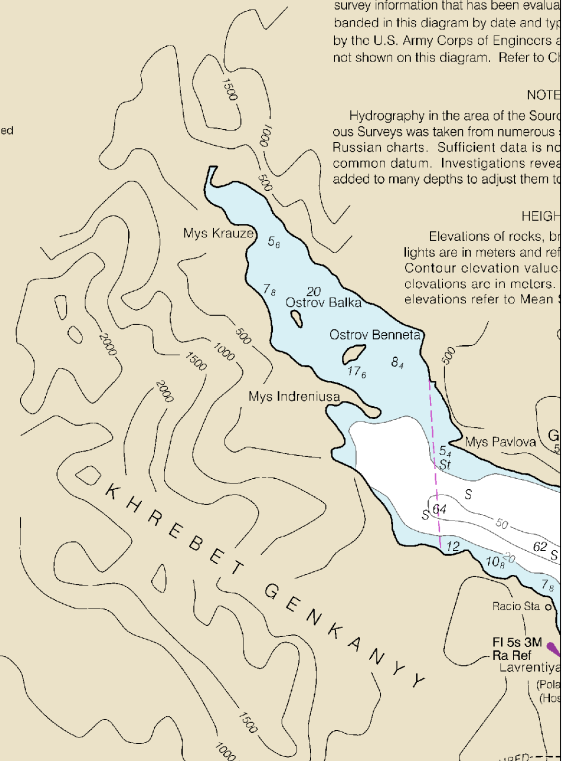
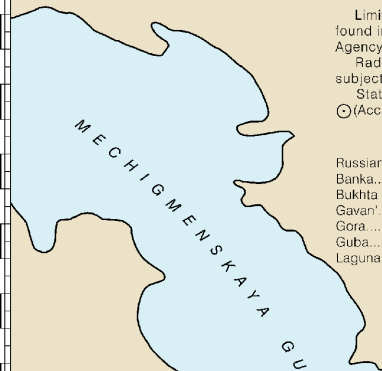
The outlined areas represent the limit survey information that has been evaluated by the U.S. Army Corps of Engineers and not shown on this diagram. Refer to C

NOTE

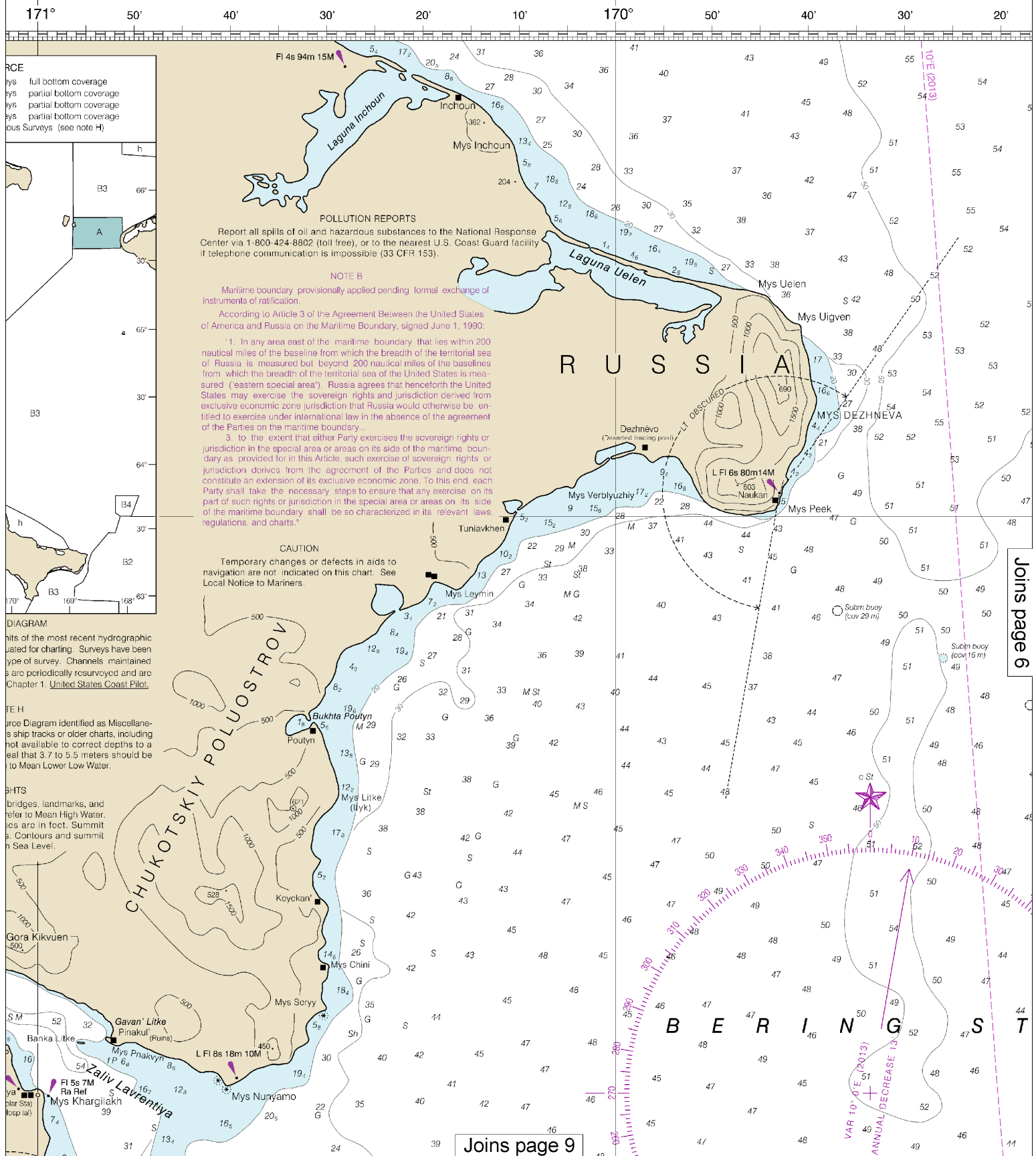
Hydrography in the area of the Source Surveys was taken from numerous Russian charts. Sufficient data is not common datum. Investigations revealed added to many depths to adjust them to

HEIGHT

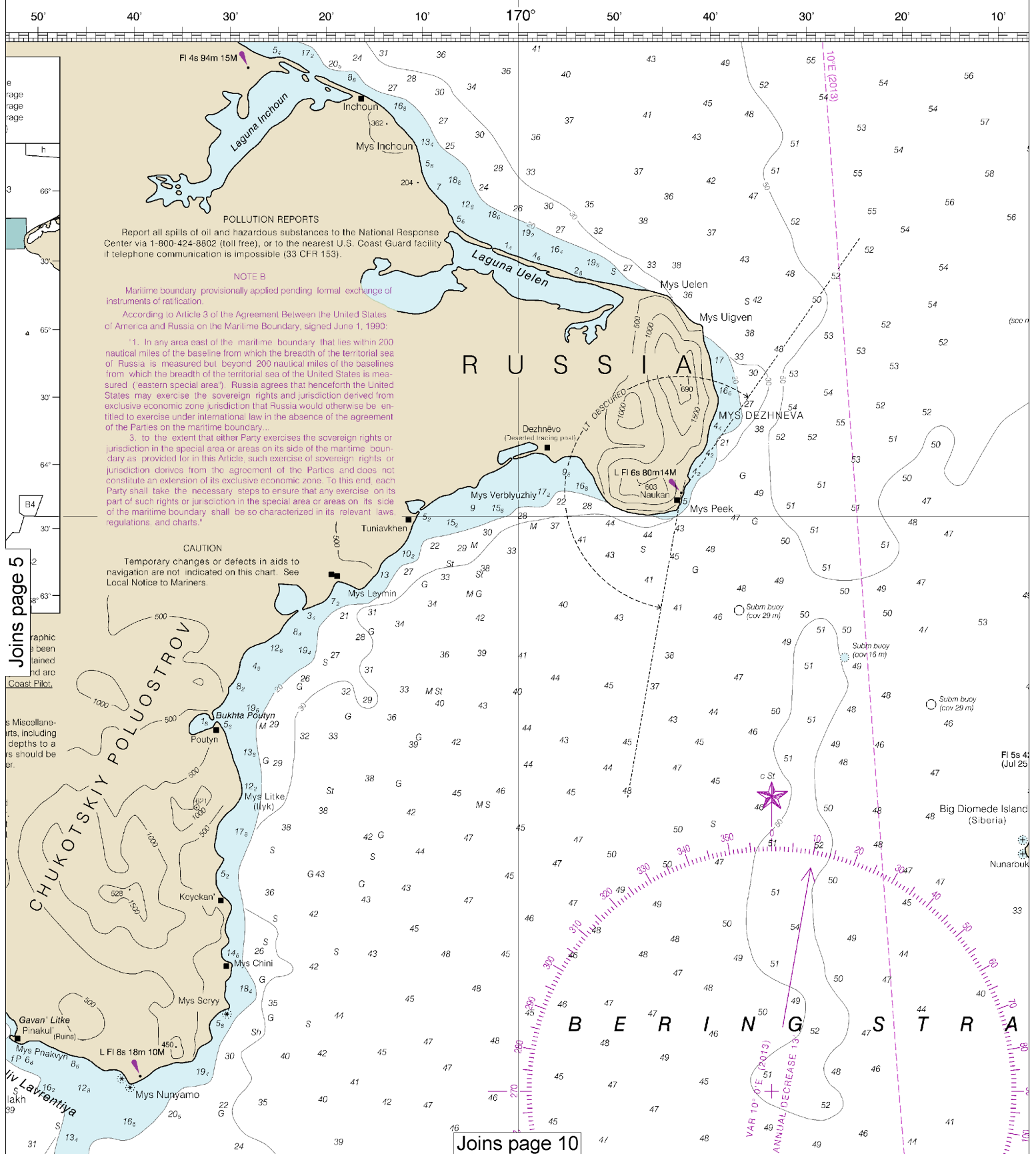
Elevations of rocks, lights are in meters and refer to Mean Low Water. Contour elevation values are in meters. elevations refer to Mean



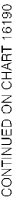
Joins page 8



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:420466. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



16220



Last Correction: 6/27/2016. Cleared through:
LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

7

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
○ (Accurate location) ◐ (Approximate location)

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Bukhta (B).....	small bay, cove	Ostrov (O).....	island
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Laguna.....	Lagoon	Zaliv.....	gulf, bay, inlet

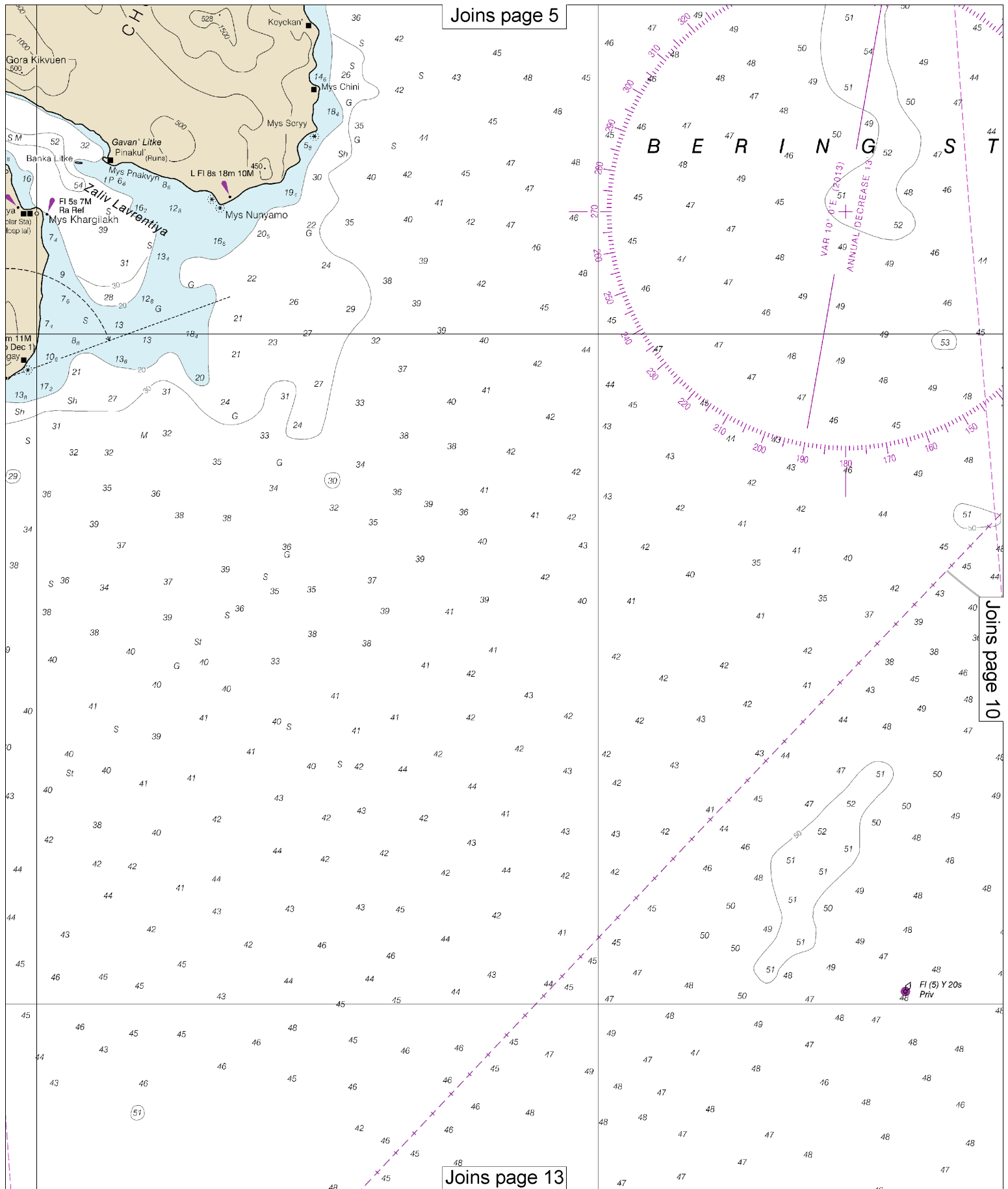
NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.
Refer to charted regulation section numbers.

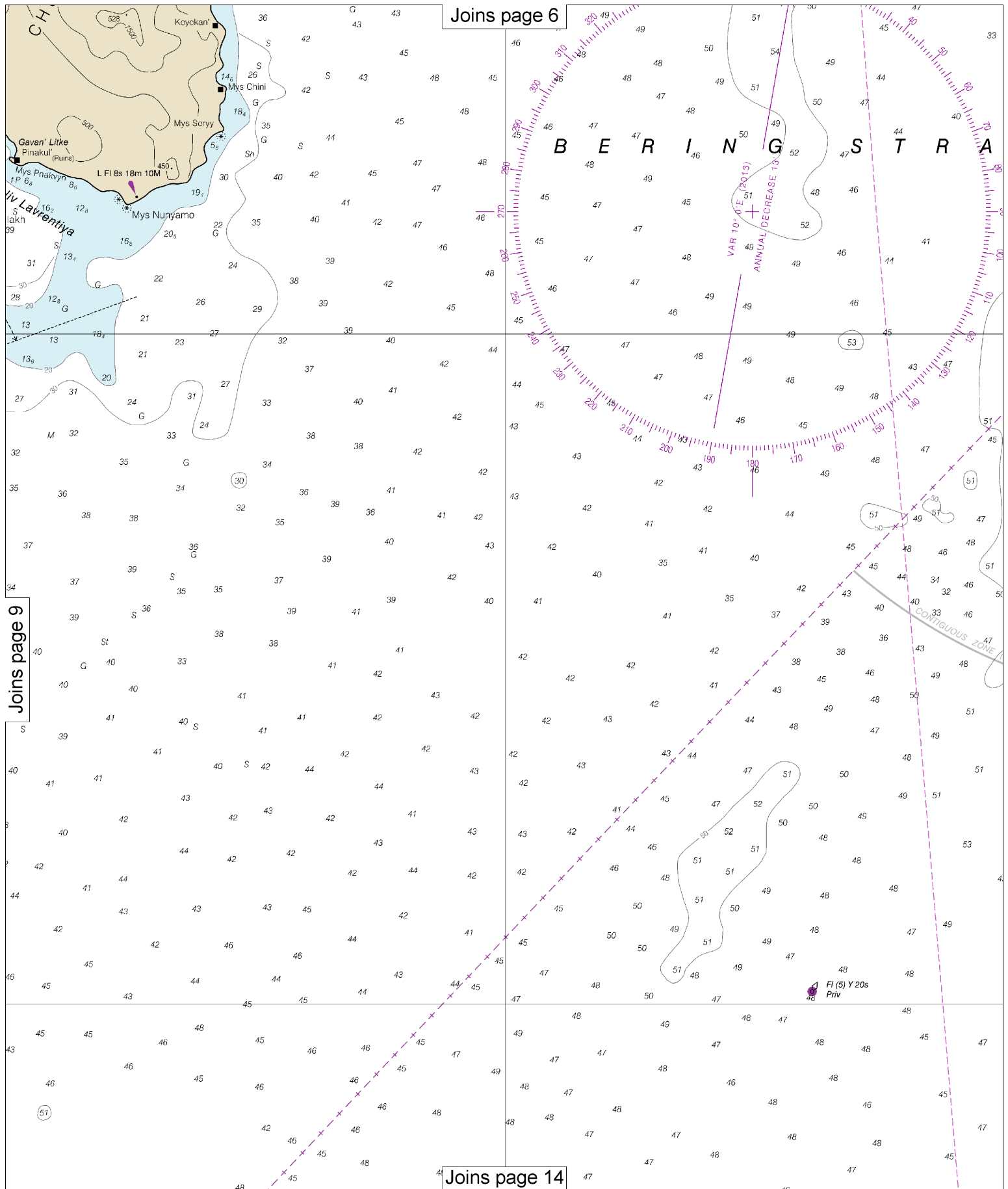
SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 9 and National Geospatial-Intelligence Agency Pub. 155 for important supplemental information.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

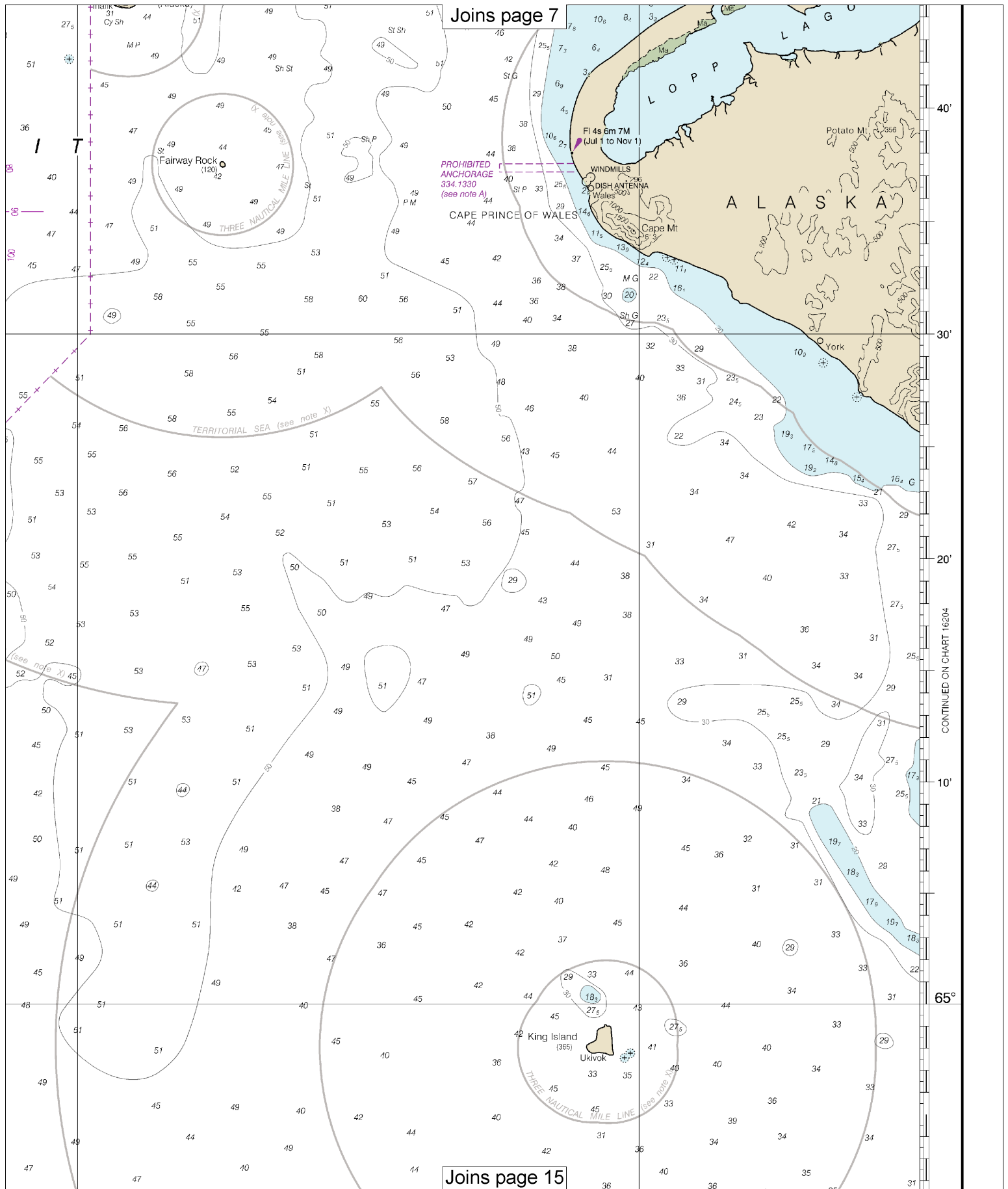
HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 3.048' southward and 10.035' westward to agree with this chart.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.
See National Geospatial-Intelligence Agency List of Lights and Fog Signals for information not included in the U.S. Coast Guard Light List.





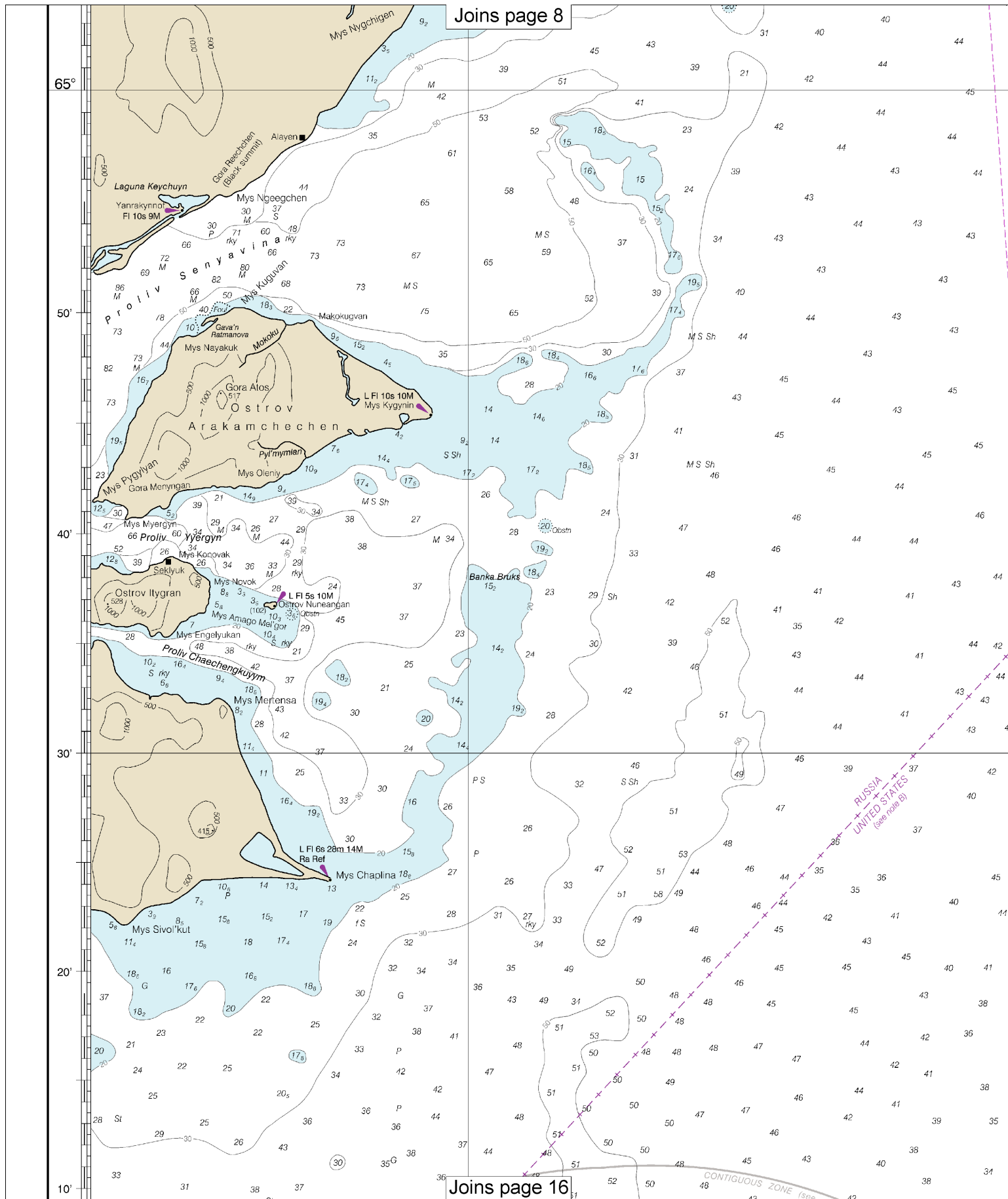
Joins page 7

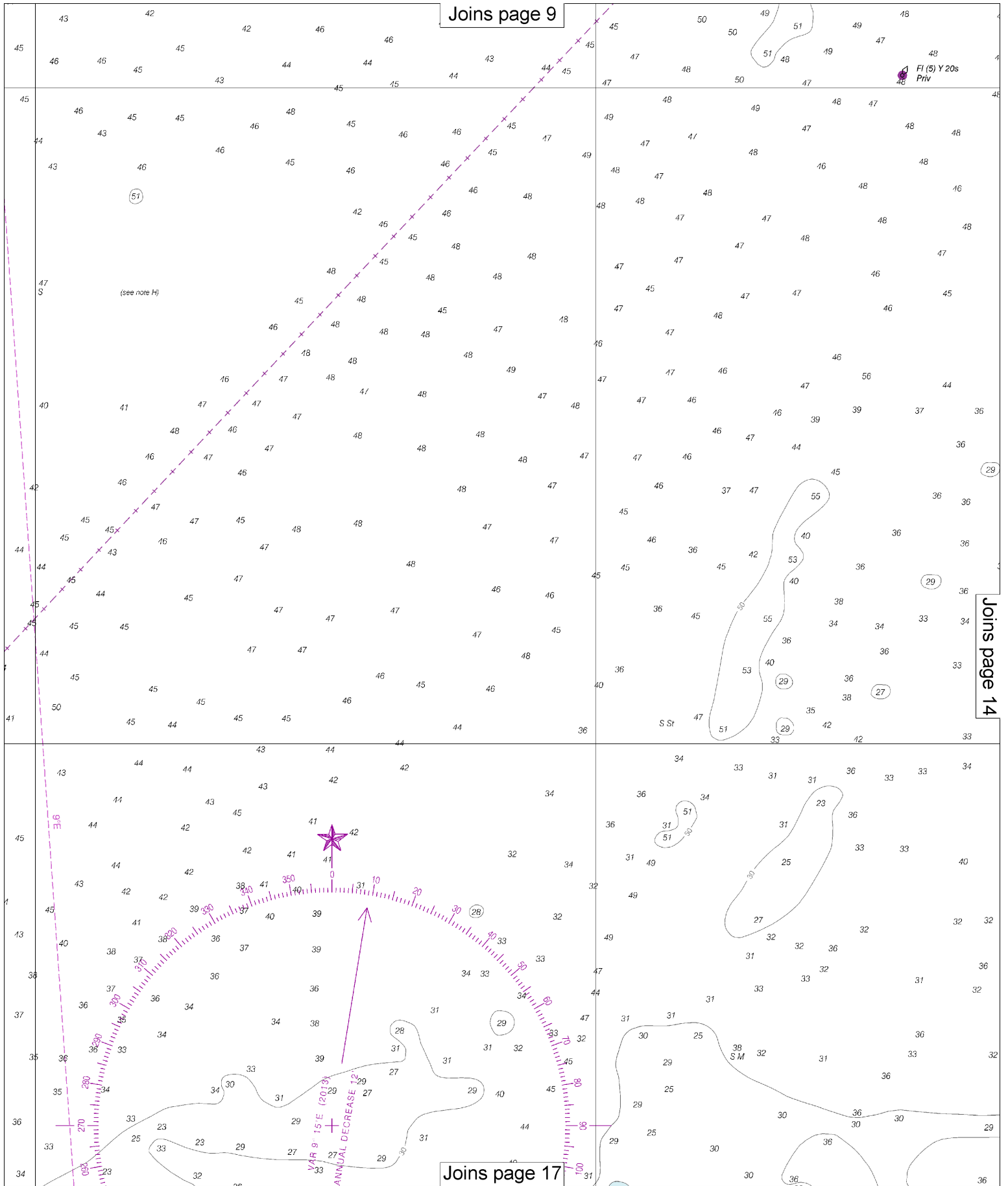


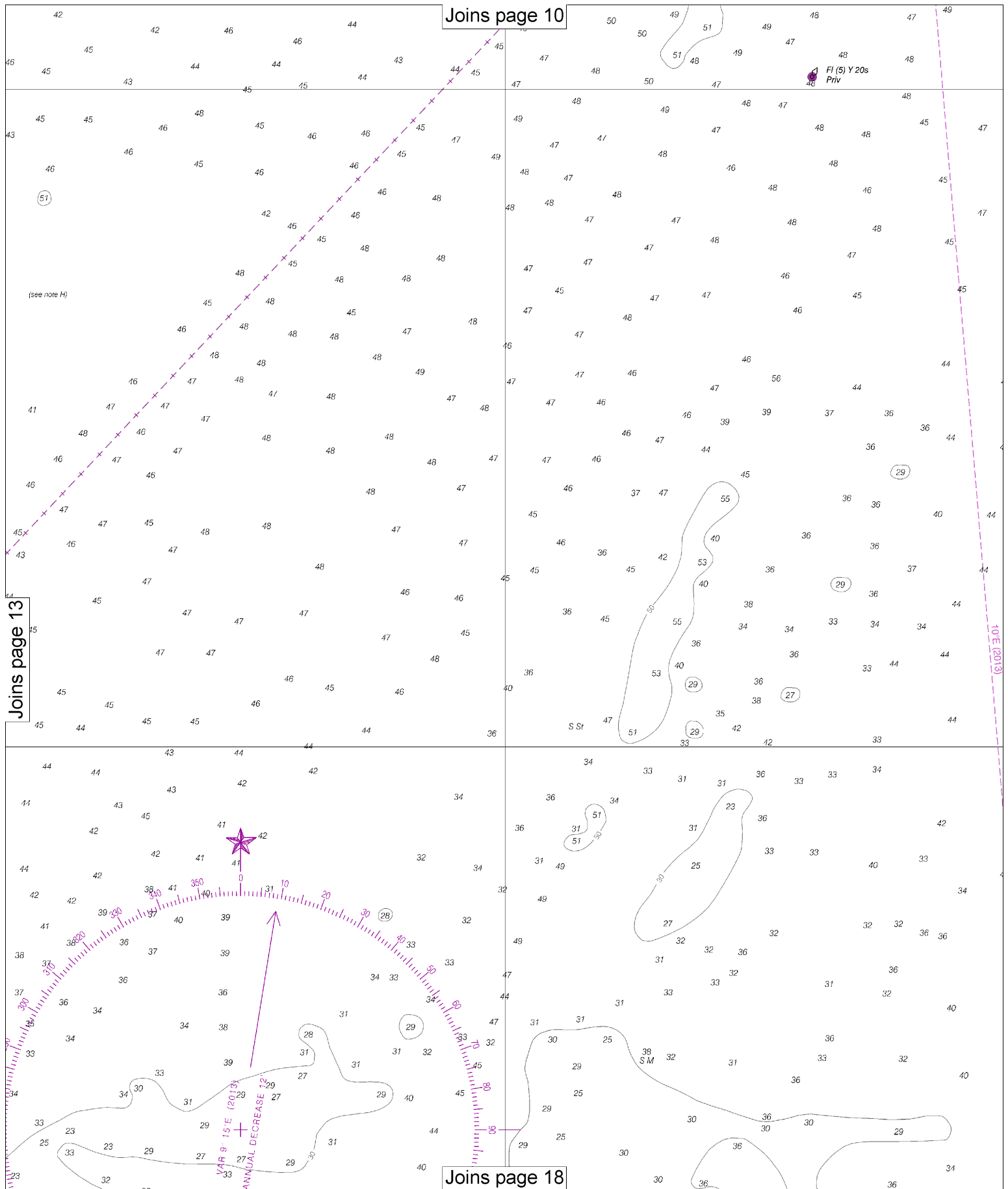
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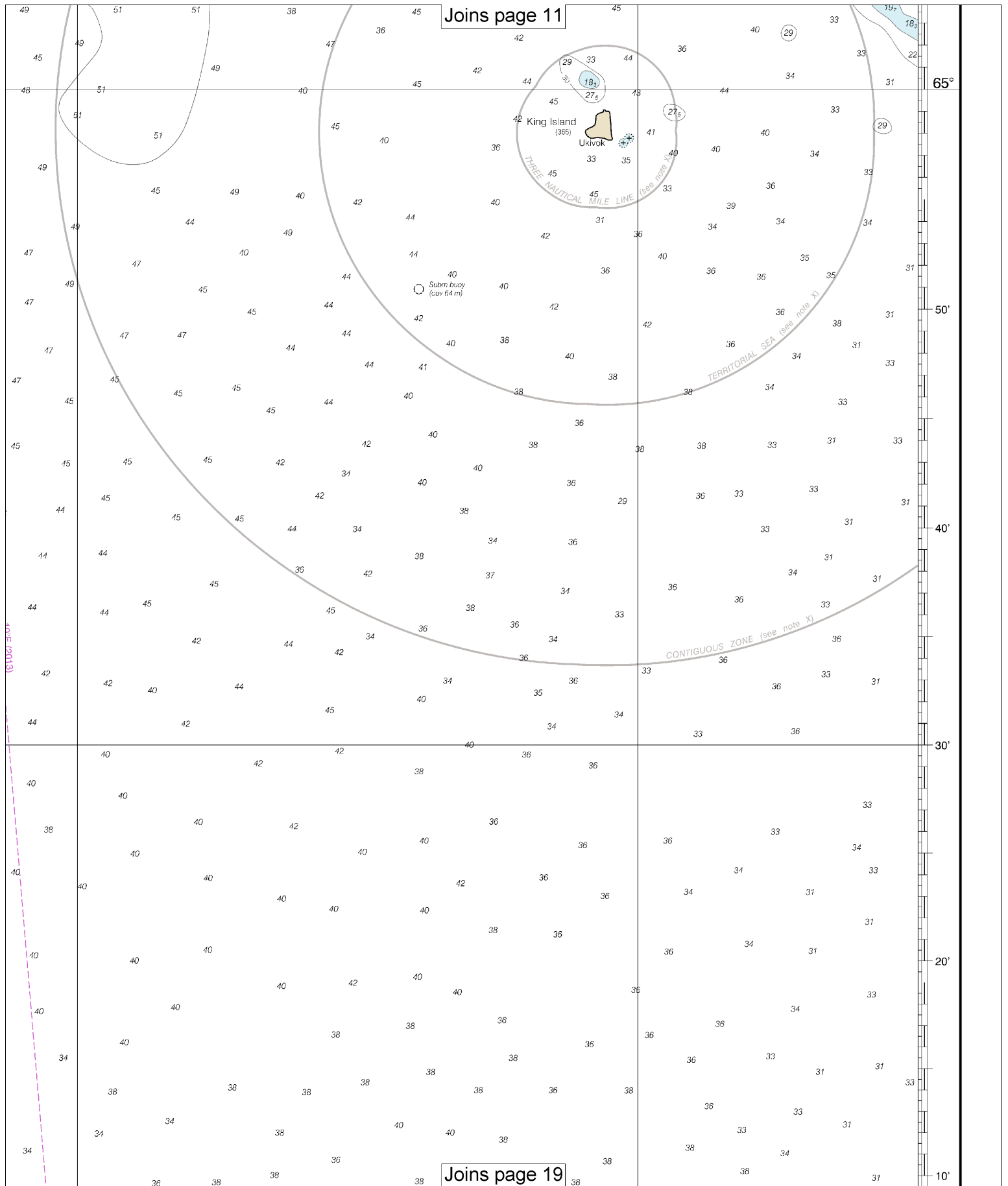
CONTINUED ON CHART 16204

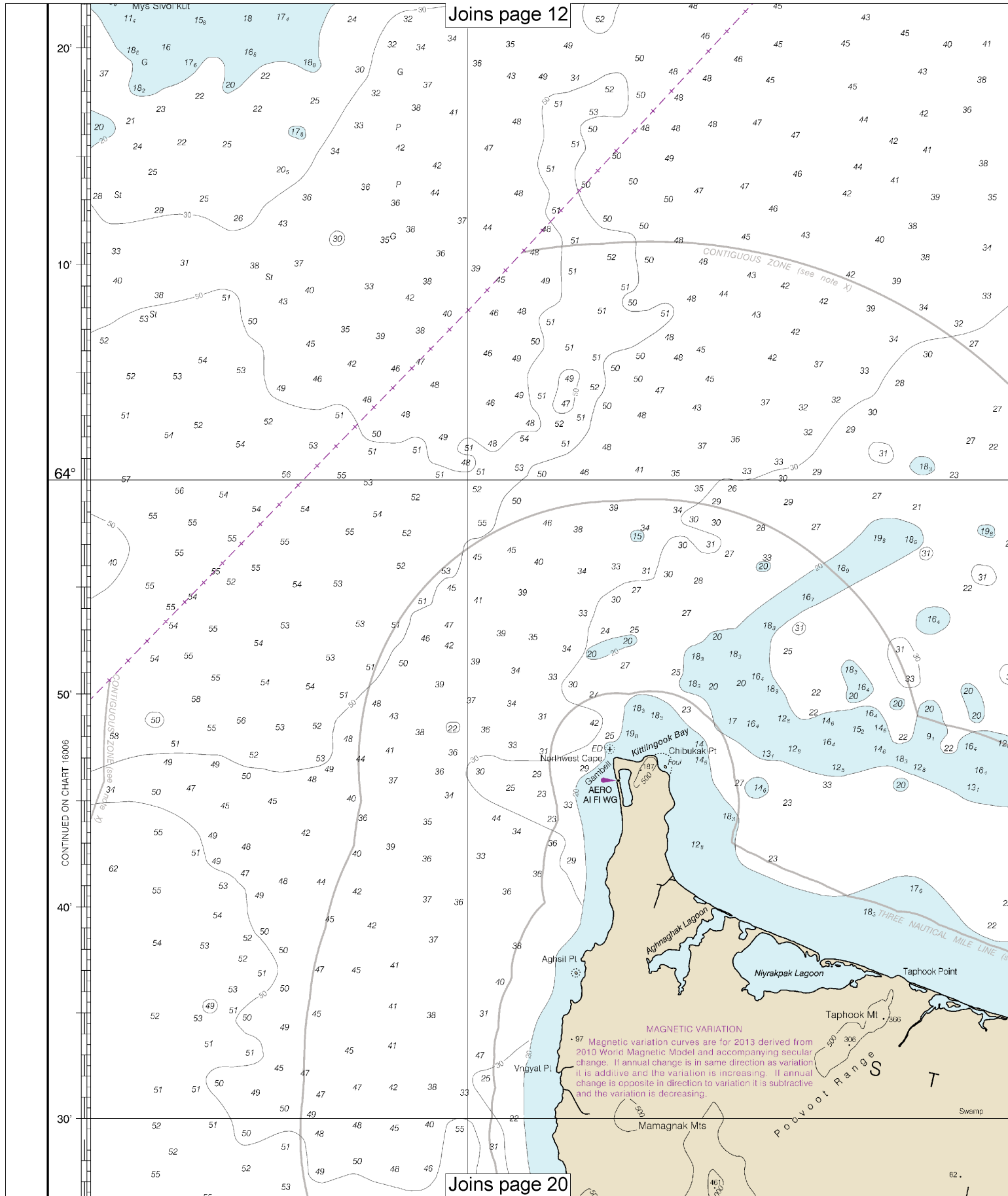
65°









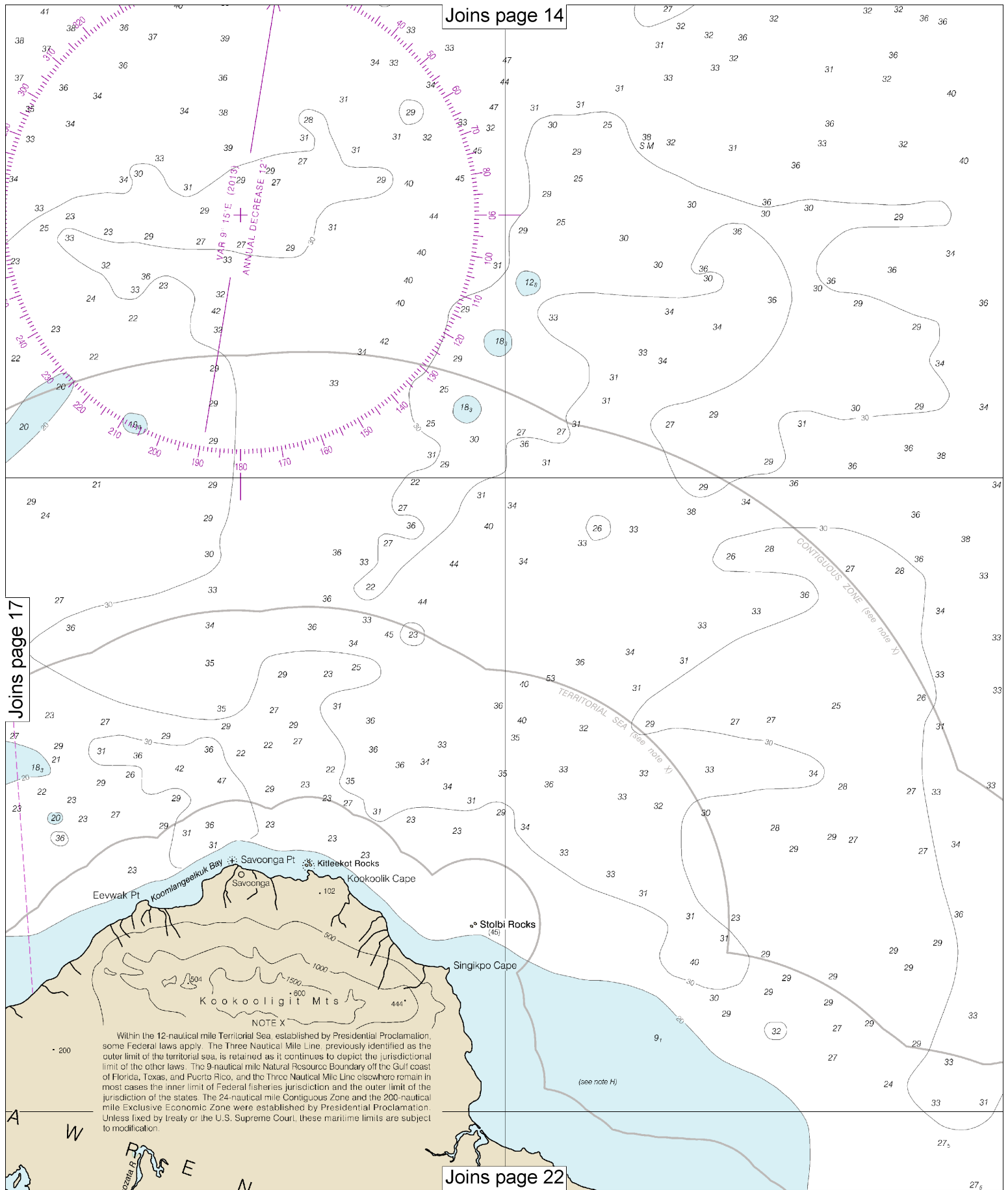


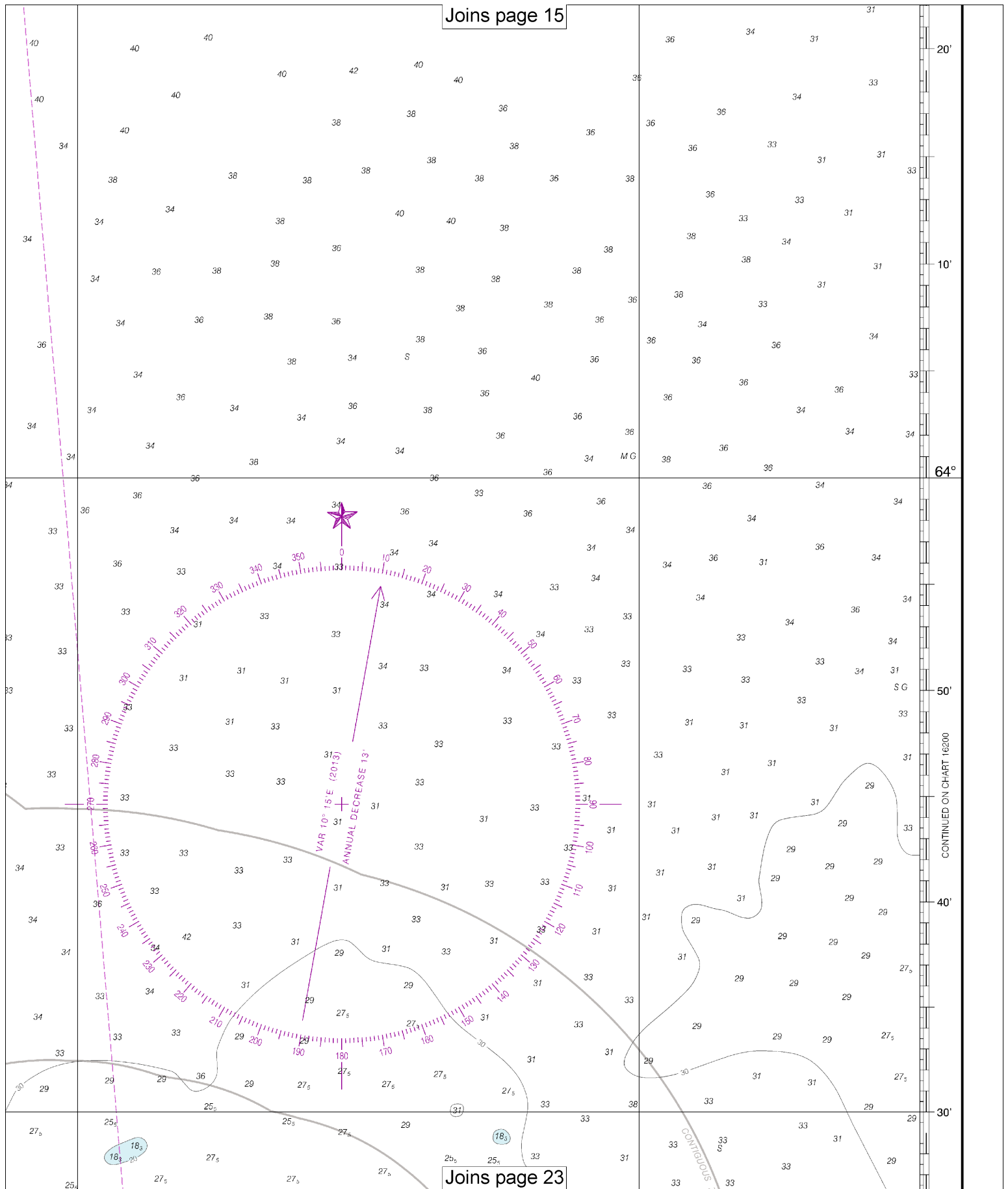
Joins page 13

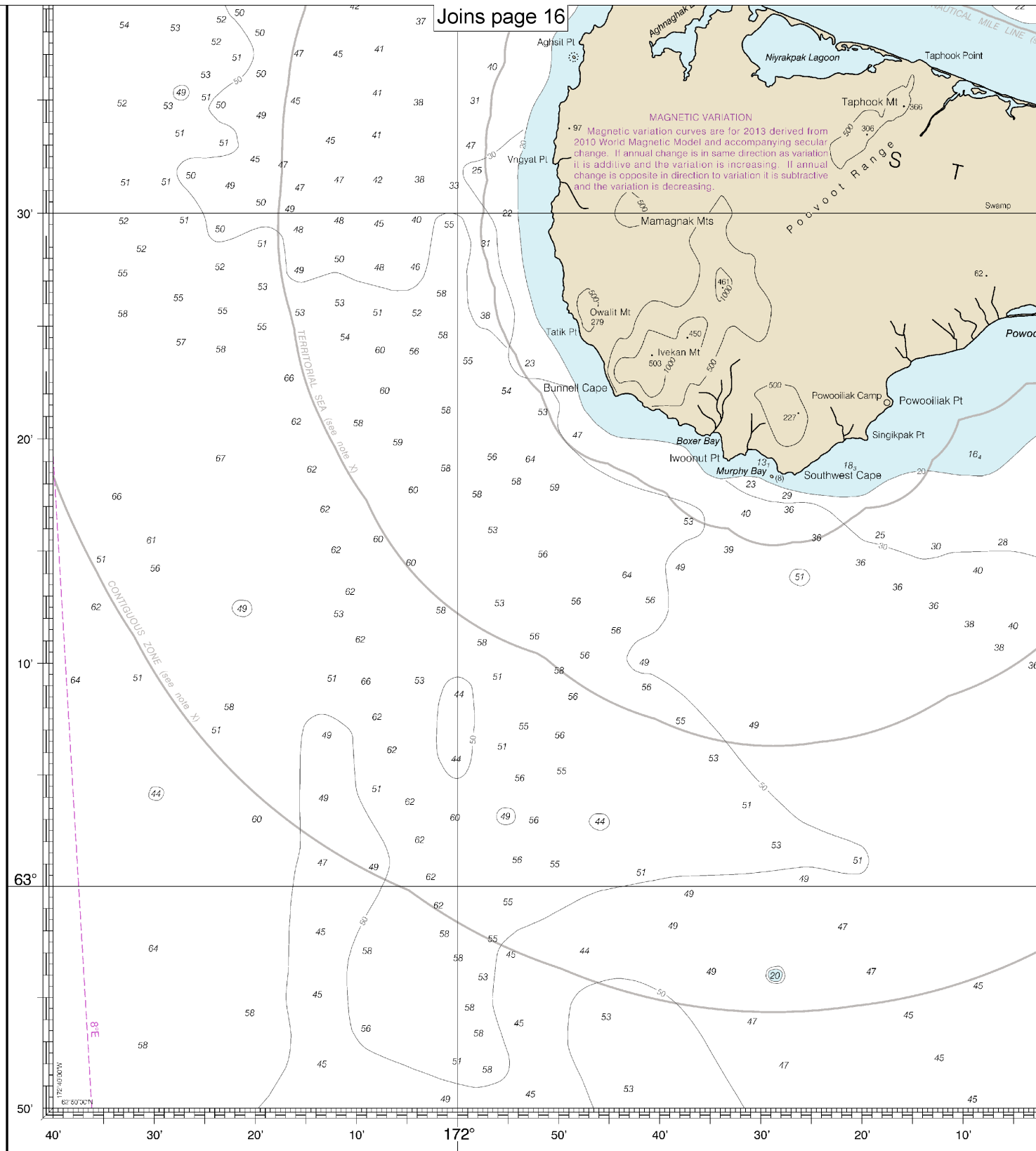
Joins page 18

Joins page 21

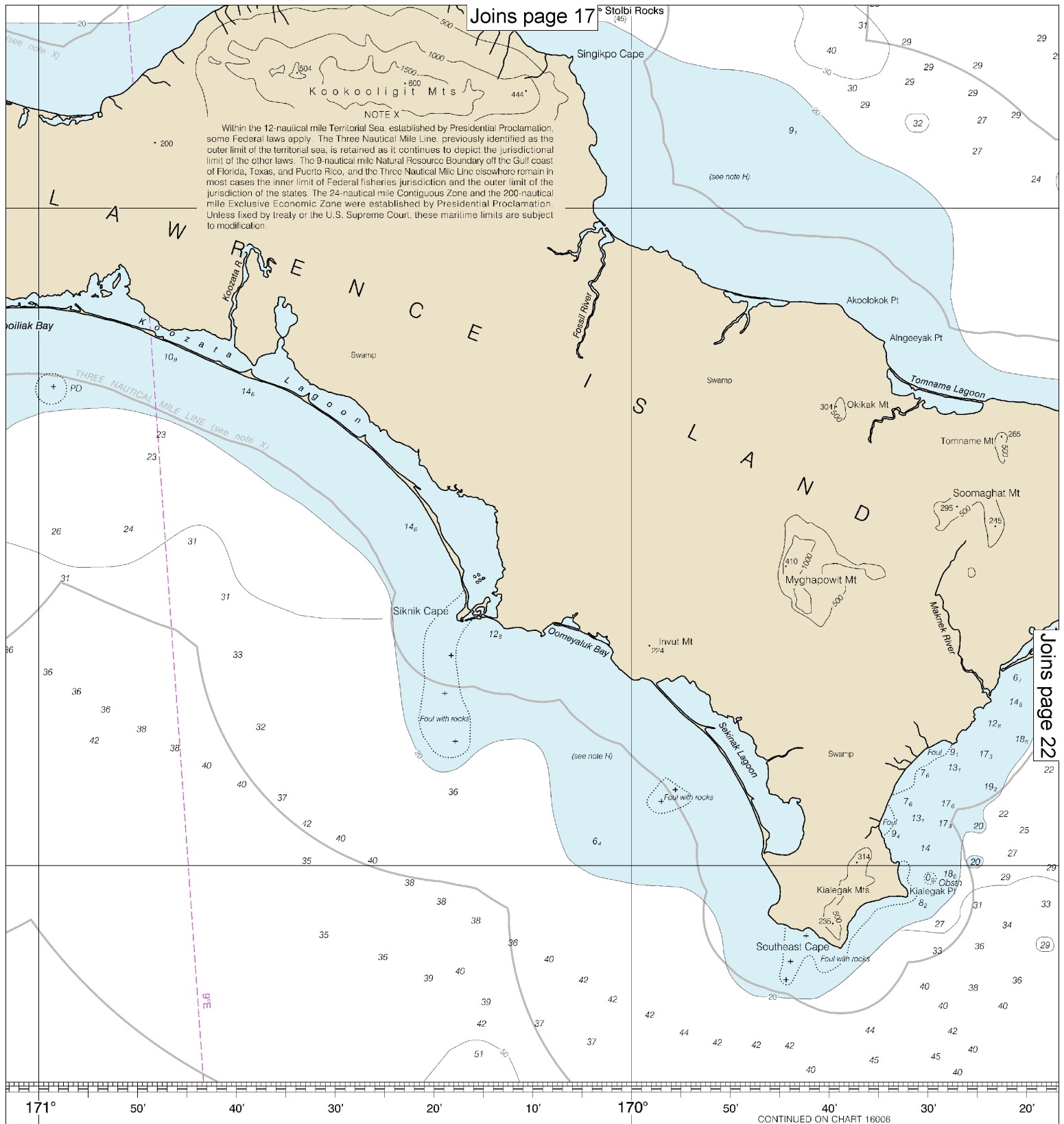
Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.



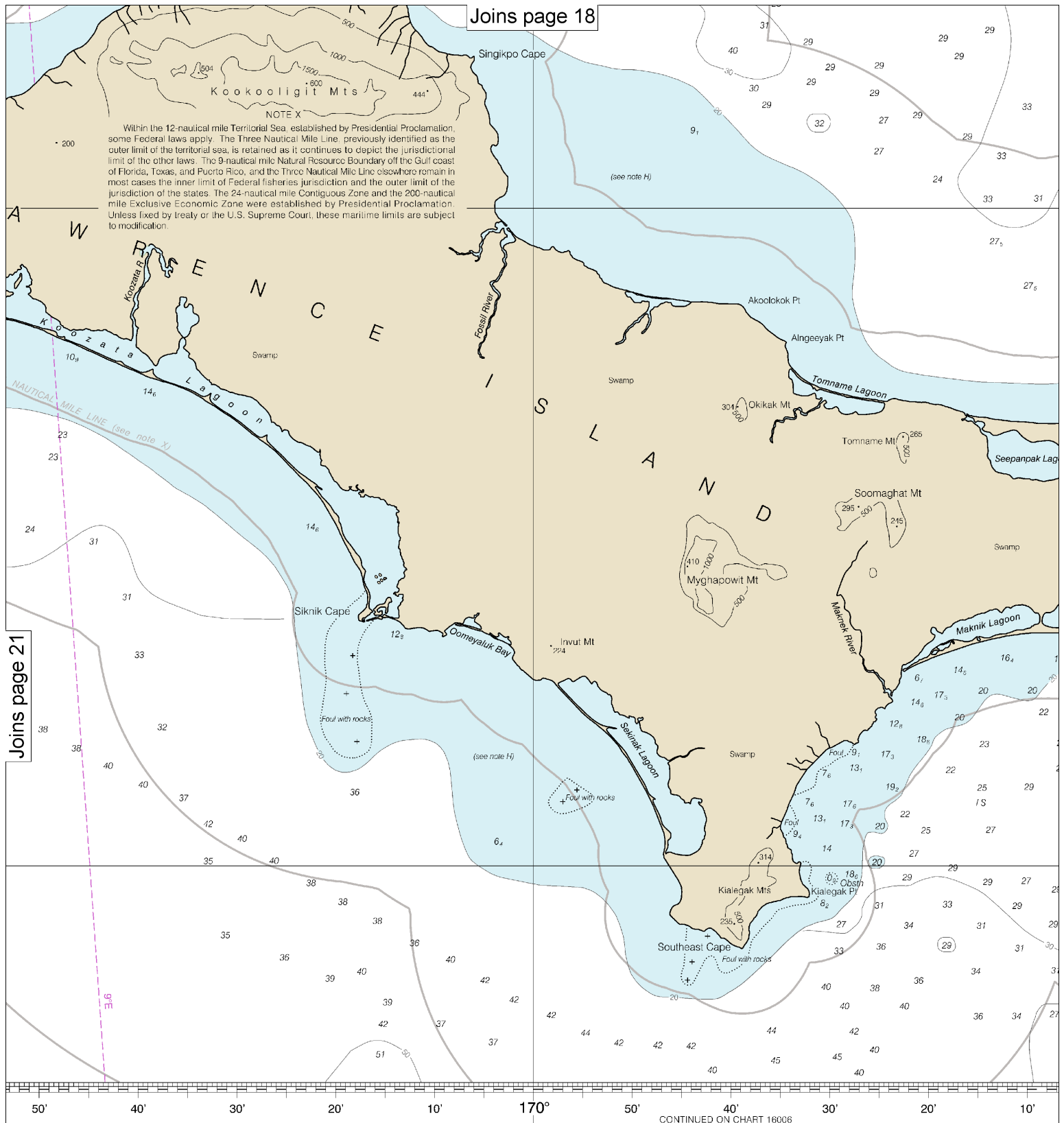




NOTE X
Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

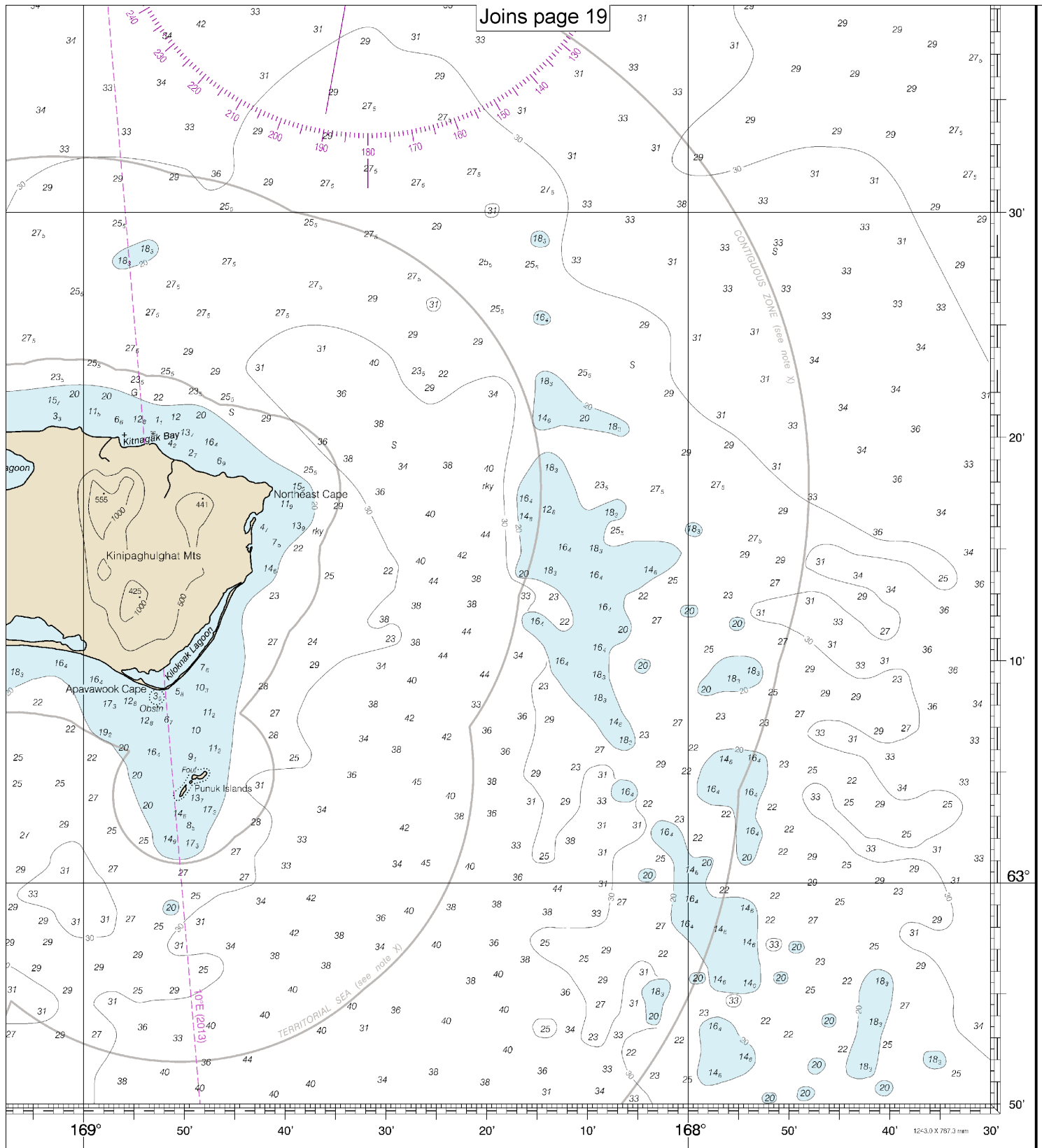


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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

ALLIGM
FEET
METERS



MS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
RS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

St. Lawrence Island to Bering Strait
SOUNDINGS IN METERS - SCALE 1:315,350

16220



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Interactive chart catalog	—	http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.